

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number  
**WO 2005/086654 A3**

(51) International Patent Classification<sup>7</sup>: **C07H 21/04**,  
C12N 15/63, 1/21, 5/00, 15/64

(21) International Application Number:  
PCT/US2005/005763

(22) International Filing Date: 24 February 2005 (24.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/548,092 27 February 2004 (27.02.2004) US

(71) Applicants (for all designated States except US): **THE TRUSTEES OF PRINCETON UNIVERSITY** [US/US]; Office of Technology Licensing & Intellectual Property, Princeton University, 4 New South Building, Princeton, NJ 08540 (US). **INVITROGEN CORPORATION** [US/US]; 1600 Faraday Avenue, Carlsbad, CA 92008 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WOOD, David, W.**

[US/US]; 34 Western Way, Princeton, NJ 08540 (US). **HSII, Judy** [US/US]; 10913 Cartwright Place, North Potomac, MD 20878 (US). **OAK, Seachol** [US/US]; 610 Via Del Caballo, San Marcos, CA 92078 (US). **CONTR-ERAS, Lydia** [US/US]; 700 Warren Road, Apt. 13-1C, Ithaca, NY 14850 (US). **CHESTNUT, John** [US/US]; 1839 Valencia Avenue, Carlsbad, CA 92008 (US).

(74) Agents: **SIRA, Serge** et al.; Katten Muchin Zavis Rosenman, 1025 Thomas Jefferson Street, NW, East Lobby, Suite 700, Washington, DC 20007-5201 (US).

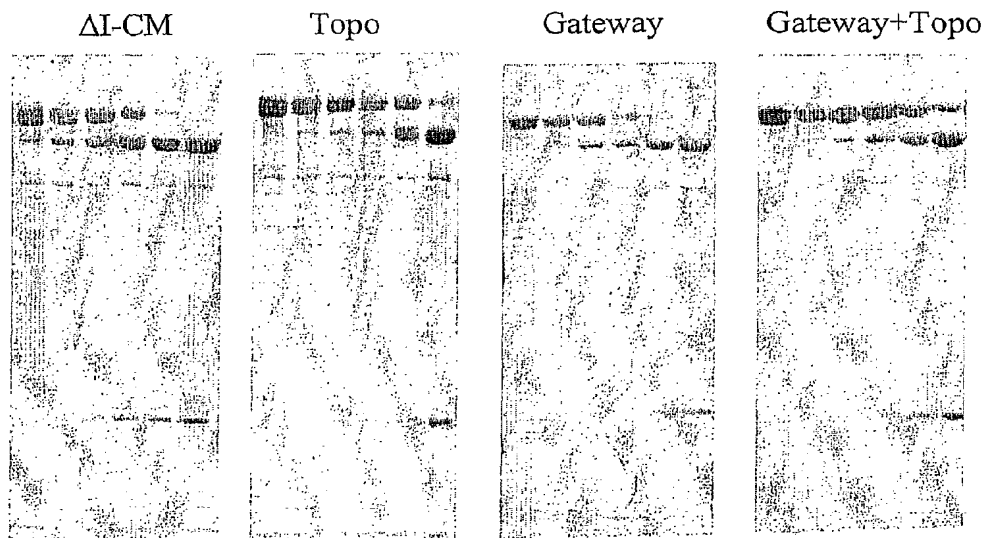
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: SELF-CLEAVING AFFINITY TAGS AND METHODS OF USE

### Cleaving Rate Studies

(Cleaving at pH 7.0 for 0, 1, 2, 4, 8 and 22 hrs)



(57) Abstract: The present invention relates to compositions and methods relating to development of modified inteins comprising one or more topoisomerase recognition sequences and the corresponding topoisomerase proteins and/or one or more recombination sites and the corresponding recombination proteins systems for use in affinity-based protein expression systems.

WO 2005/086654 A3



**(84) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

**(88) Date of publication of the international search report:**

29 December 2005

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*